

## REMARKS

This is intended as a full and complete response to the Office Action dated June 11, 2003, having a shortened statutory period for response set to expire on September 11, 2003. Please reconsider the claims pending in the application for reasons discussed below.

## ELECTION/RESTRICTION

The Applicants confirm the election with traverse to prosecute the invention of Group II (claims 14-20). Claims 1-13 and 21-23 are cancelled without prejudice.

## CLAIM OBJECTIONS

Claim 20 is objected to for informalities. In response, the Applicants have amended claim 20 to recite "[t]he contact ring ...", replacing "[t]he contact ridge ...". Thus, the Applicants respectfully request that the objection to claim 20 be withdrawn.

## CLAIM REJECTIONS

### **A. 35 U.S.C. §102                      Claims 14 and 15** ***Crafts et al.***

Claims 14 and 15 stand rejected under 35 U.S.C. §102(b) as being unpatentable over United States Patent No. 5,807,469 issued September 15, 1998 to *Crafts et al.* (hereinafter referred to as "*Crafts*"). In response, the Applicants have amended independent claim 14, from which claim 15 depends, to more clearly recite aspects of the invention.

*Crafts* does not teach, show or suggest all of the limitations of independent claim 14. *Crafts* teaches an annular cathode contact device (e.g., a substrate) upon which a silicon wafer is placed. The cathode contact device includes an electrically conductive continuous contact coupled thereto that extends around the perimeter of a first side of the cathode device. In one embodiment, an annular dielectric layer is bonded to a first side of the electrically conductive continuous contact that is adjacent to the cathode contact device. *Crafts* does not teach, show or suggest depositing at least a first

conductive layer on a substrate, wherein said first conductive layer coats all surfaces of the substrate, and depositing at least a first insulative layer adjacent to the at least a first conductive layer, on the substrate, wherein said first insulative layer coats all surfaces of the substrate, as recited by independent claim 14 as amended.

Thus, independent claim 14, and claim 15 that depends therefrom, are patentable over *Crafts*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

**B. 35 U.S.C. §103                      Claims 16-20**

***Crafts* in view of *Kholodenko et al.***

**1. Claims 16 and 17**

Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Crafts* in view of United States Patent No. 5,885,469, issued March 23, 1999 to *Kholodenko et al.* (hereinafter referred to as "*Kholodenko*"). In response, the Applicants have amended independent claim 14, from which claims 16 and 17 depend, to more clearly recite aspects of the invention.

The burden for establishing a prima facie case of obviousness falls on the Examiner. See, MPEP §2142. A basic requirement of establishing a prima facie case of obviousness is that the combination of prior art references must teach or suggest all the claim limitations and that there must be a motivation to combine the references. See, MPEP §2143.

*Crafts* has been discussed above. *Kholodenko* teaches an electrostatic chuck having a conductive layer embedded between first and second dielectric layers. The second dielectric layer is adapted to support a wafer and comprises a sculpted wafer support surface that conforms to a topographical design etched in the conductive layer below. *Crafts* and *Kholodenko* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 14. Specifically, *Crafts* and *Kholodenko* do not teach, show or suggest depositing at least a first conductive layer on a substrate, wherein said first conductive layer coats all surfaces of the substrate, and depositing at least a first insulative layer adjacent to the at least a first conductive layer,

on the substrate, wherein said first insulative layer coats all surfaces of the substrate, as recited by independent claim 14 as amended.

Thus, claim 14, and claims 16 and 17 that depend therefrom, are patentable over *Crafts* in view of *Kholodenko*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

## 2. Claims 18-20

Claims 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Crafts* in view of *Kholodenko*. The Applicants respectfully disagree with the Examiner for the reasons discussed below.

As discussed above, *Crafts* teaches a cathode contact device having an electrically conductive continuous contact coupled thereto that extends around the perimeter of the cathode device. In one embodiment, an annular dielectric layer is bonded to one side of the electrically conductive continuous contact. In the Examiner's rejection of claims 14 and 15 under 35 U.S.C. §102, the Examiner construes the electrically conductive continuous contact device to be a "conductive layer" of the cathode contact device. *Kholodenko*, as discussed above, teaches a sculpted wafer support surface formed in a dielectric layer. The sculpted surface comprises raised surfaces or bumps that conform to an etch design in a conductive layer below. *Crafts* and *Kholodenko* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 18. Specifically, *Crafts* and *Kholodenko* do not teach, show or suggest a conductive layer, an insulative layer deposited above the conductive layer, a contact in electrical contact with the conductive layer and extending through the insulative layer to an external surface, and a compliant ridge formed on the external surface, and extending about the periphery of the contact, as recited by independent claim 18.

Thus, claim 18, and claims 19 and 20 that depend therefrom, are patentable over *Crafts* in view of *Kholodenko*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

## **NEW CLAIMS**

The Applicants have added new claims 24-28, drawn to a method for supplying electricity to a substrate. The Applicants respectfully submit that claims 24-28 are properly added to the claim set of Group II (*i.e.*, claims 14-20 reciting a method for forming a contact ring), because new independent claim 24 recites a method that demonstrates how to use the contact ring formed by the method of claims 14-20 to supply electricity to a substrate.

## **CONCLUSION**

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or apparatus of the present invention. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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Keith M. Tackett  
Registration No. 32,800  
MOSER, PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd., Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)